

PLANNING FOR SEA LEVEL RISE ON THE HAYWARD SHORELINE

City of Hayward Council Work Session
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Hayward Area Shoreline Planning Agency (HASPA)

Members:

- East Bay Regional Park District
- Hayward Area Recreation & Park District
- City of Hayward

Overview

■ Vulnerability

- Vulnerability of different functions

■ Adaptation

- Uncertainty in rate, certainty in direction
- Moving frame of reference

■ Next Steps



Habitat



Storm Drainage



Bockman
Channel

Sulfer Creek
Line "K"

Line "A"

Landfills & Wastewater



Oro Loma wastewater treatment plant

Solar drying ponds

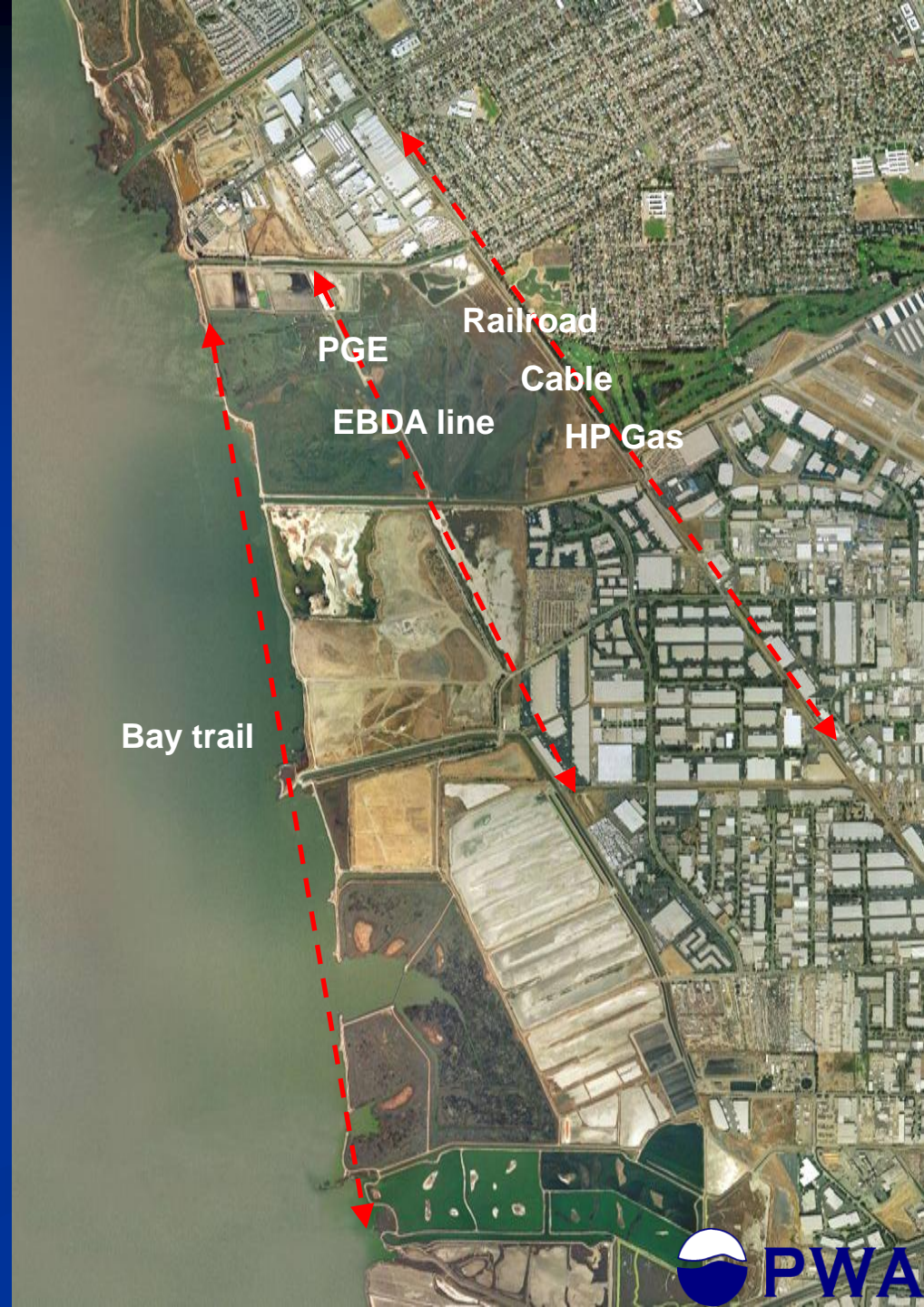
KOFY

Alameda County

West Winton Ave

Hayward Treatment Facility

Utilities & Trails

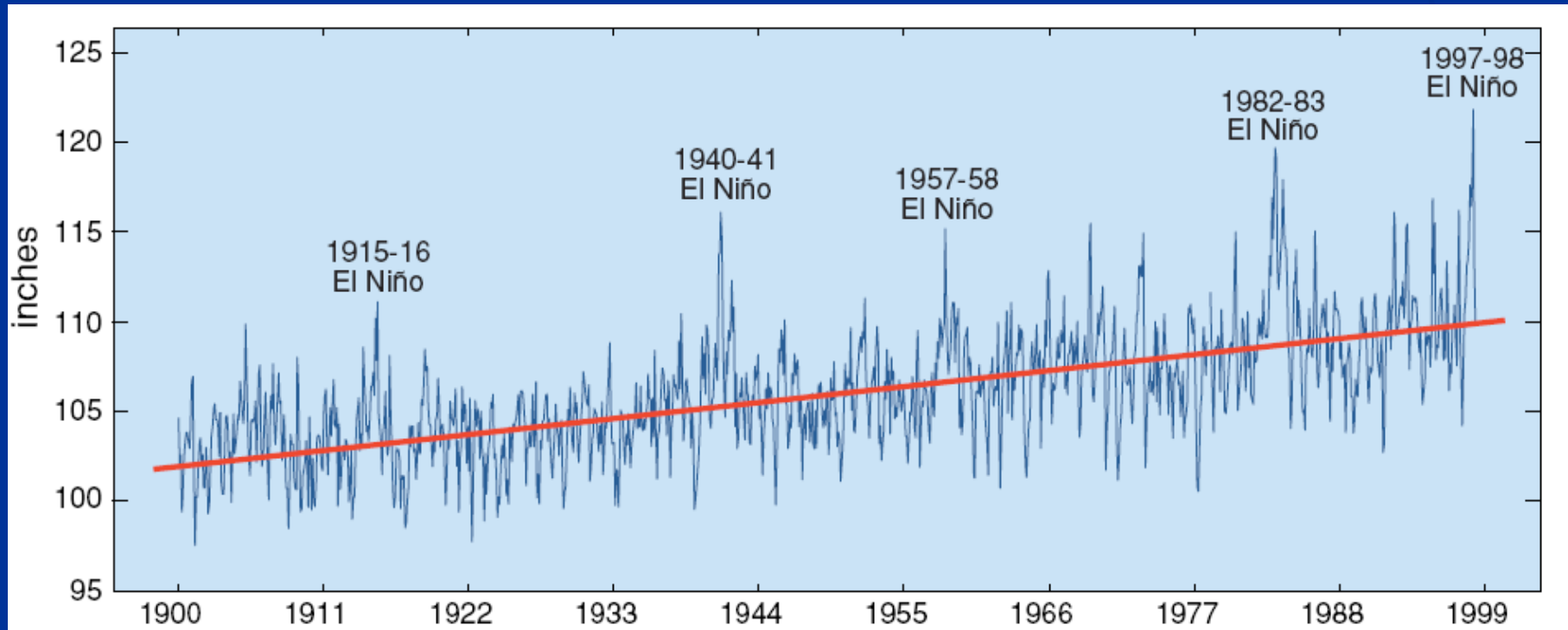


Sea level rise: San Francisco

Sea level rose 7 inches in last century

Rate of sea level change 2.17 mm/yr

Higher than global average (1.5-2 mm/yr) because of local subsidence



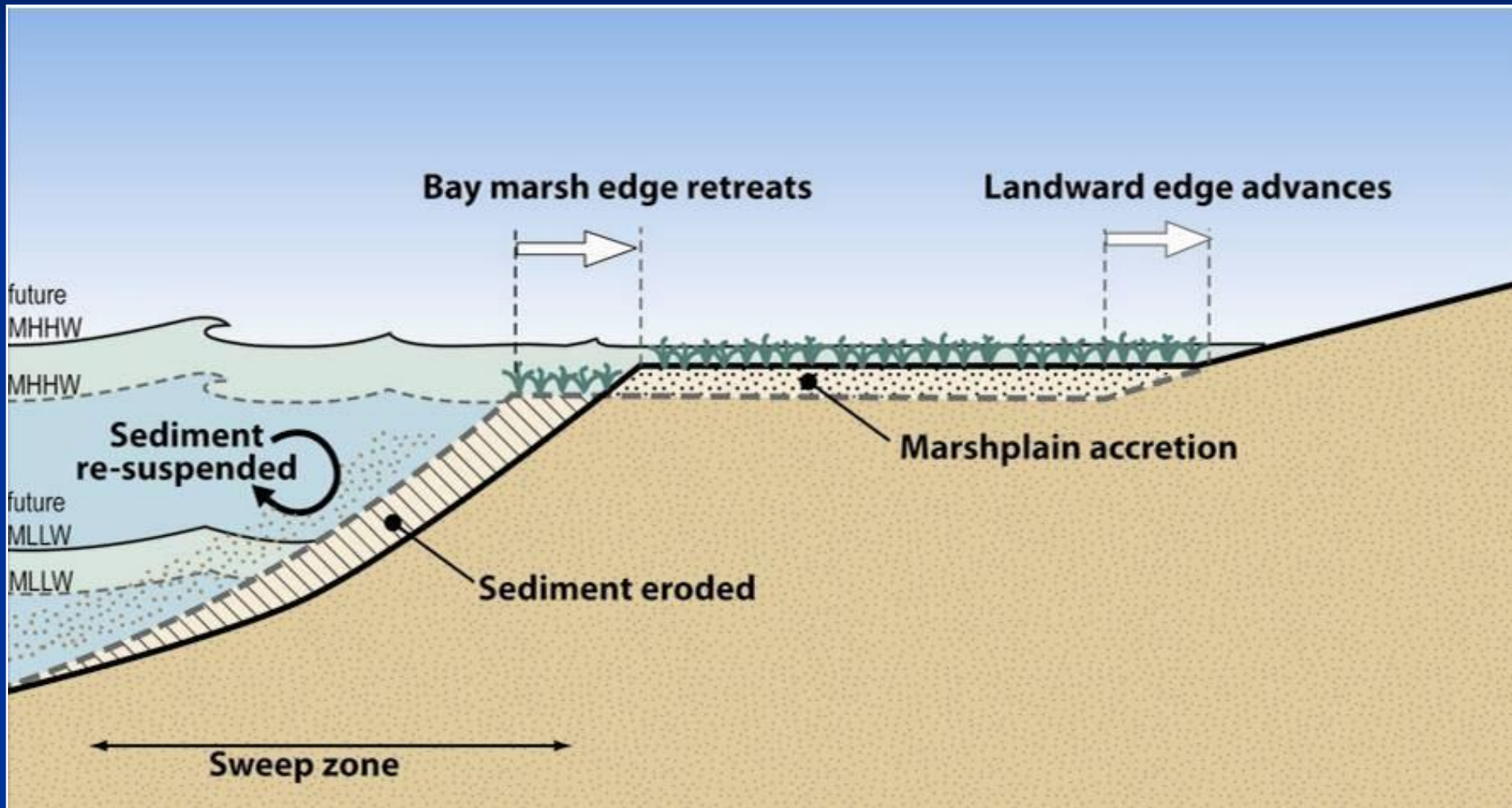
Potential inundation

- Light Blue — 16 in
- Dark Blue — 55 in

Source: USGS, BCDC



Natural shoreline evolution



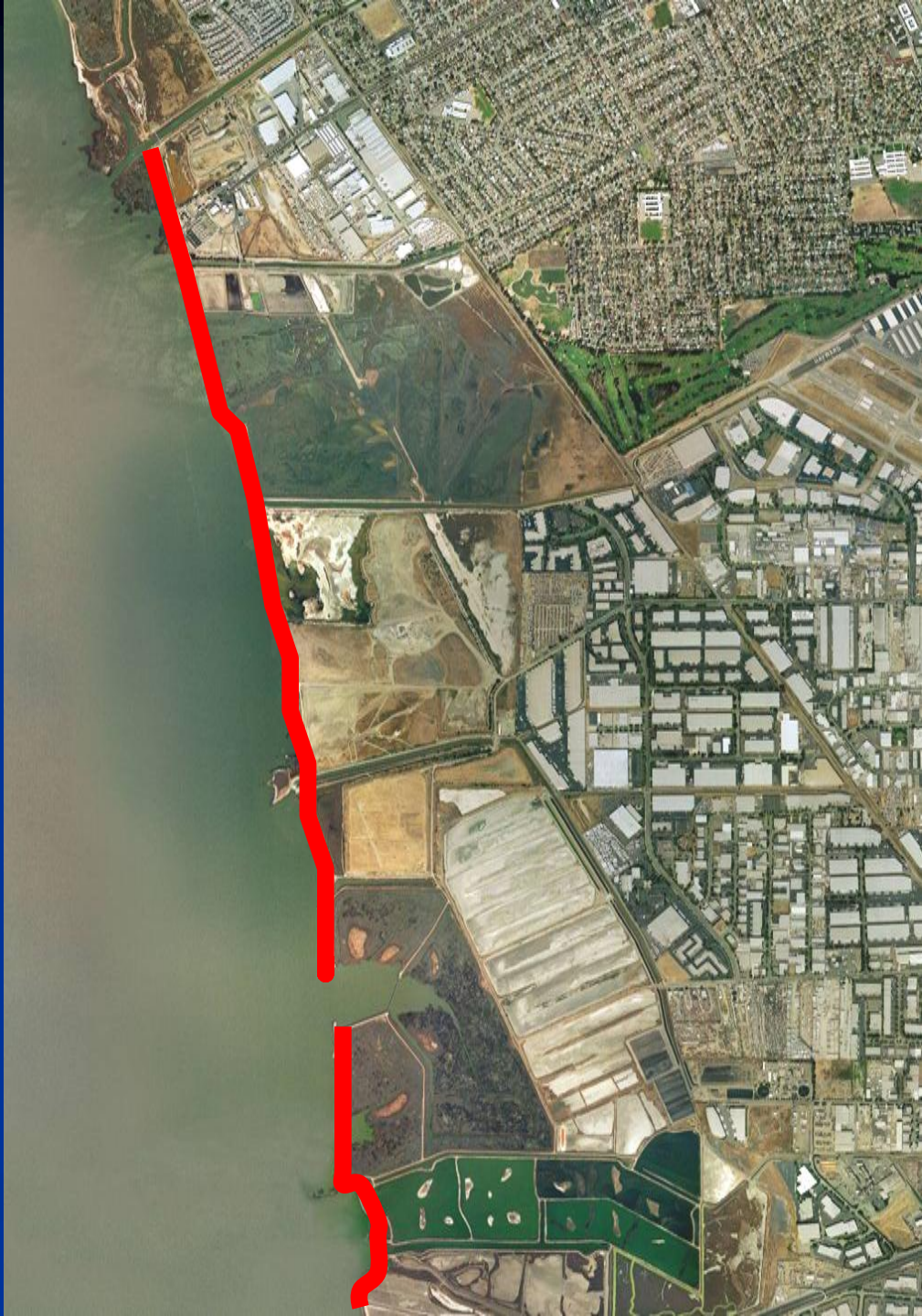


Frank's Dump West - New Year's Eve 2005
8.9 ft tides; 40mph westerly winds



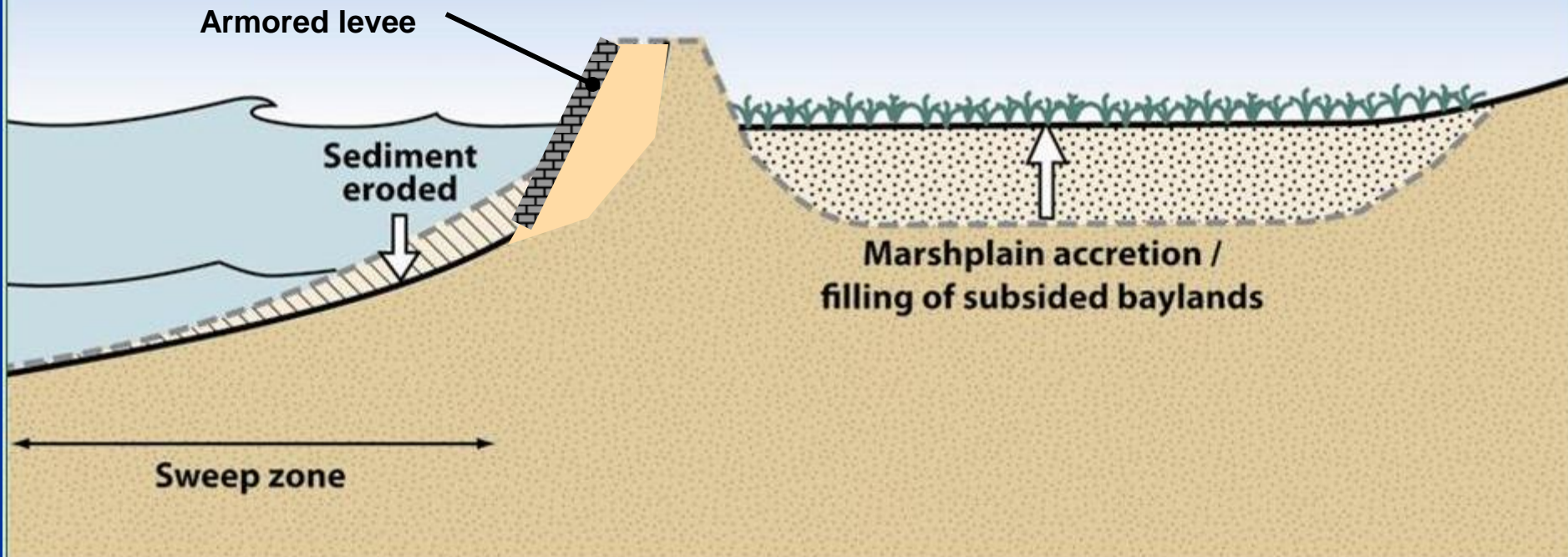
Hayward Marsh - New Year's Eve 2005
8.9 ft tides; 40mph westerly winds

Hold the Line

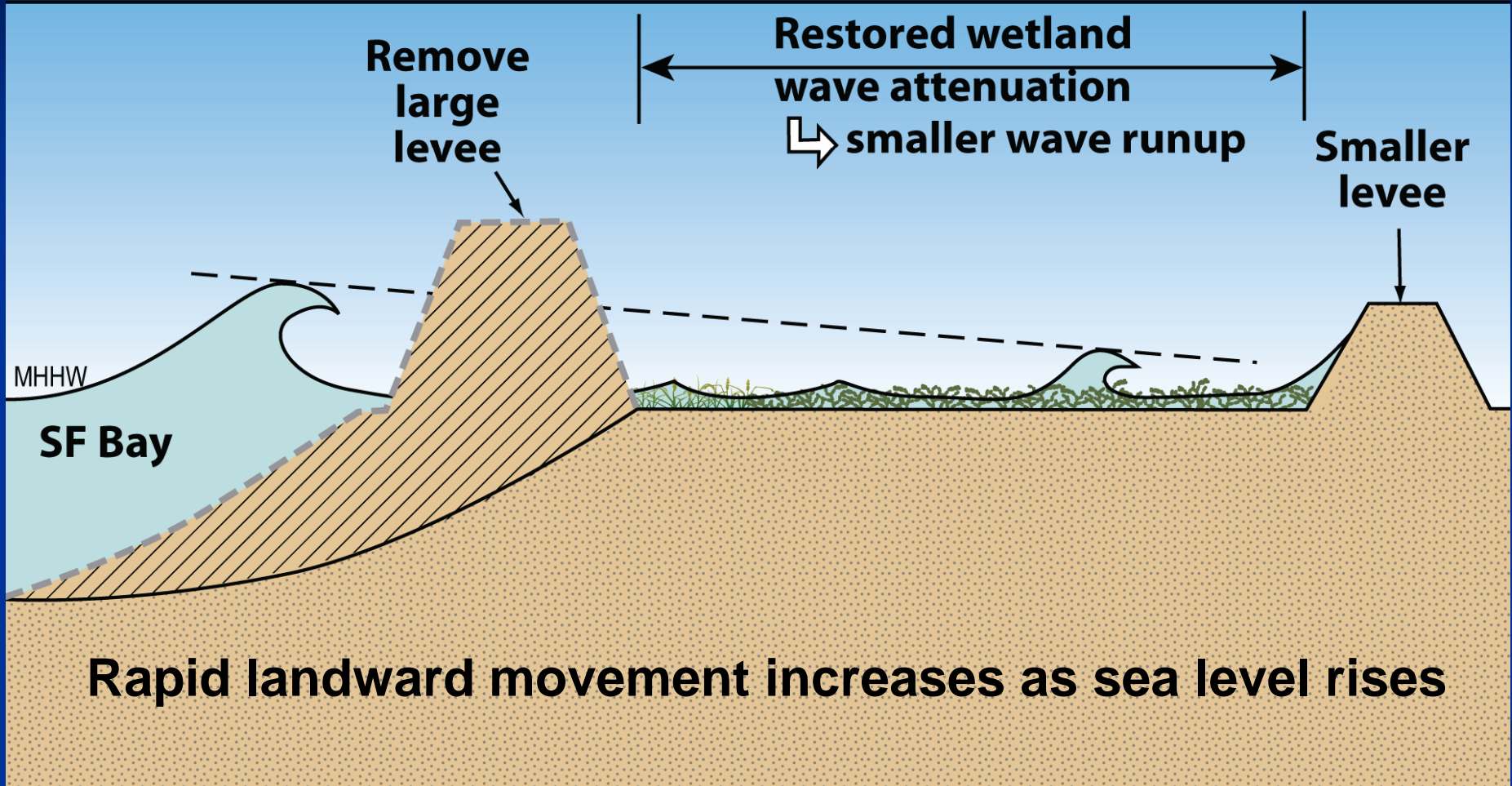


Hold the Line

Levee slope increases as mudflat lowers and levee raised



Realign



Realign



Opportunities

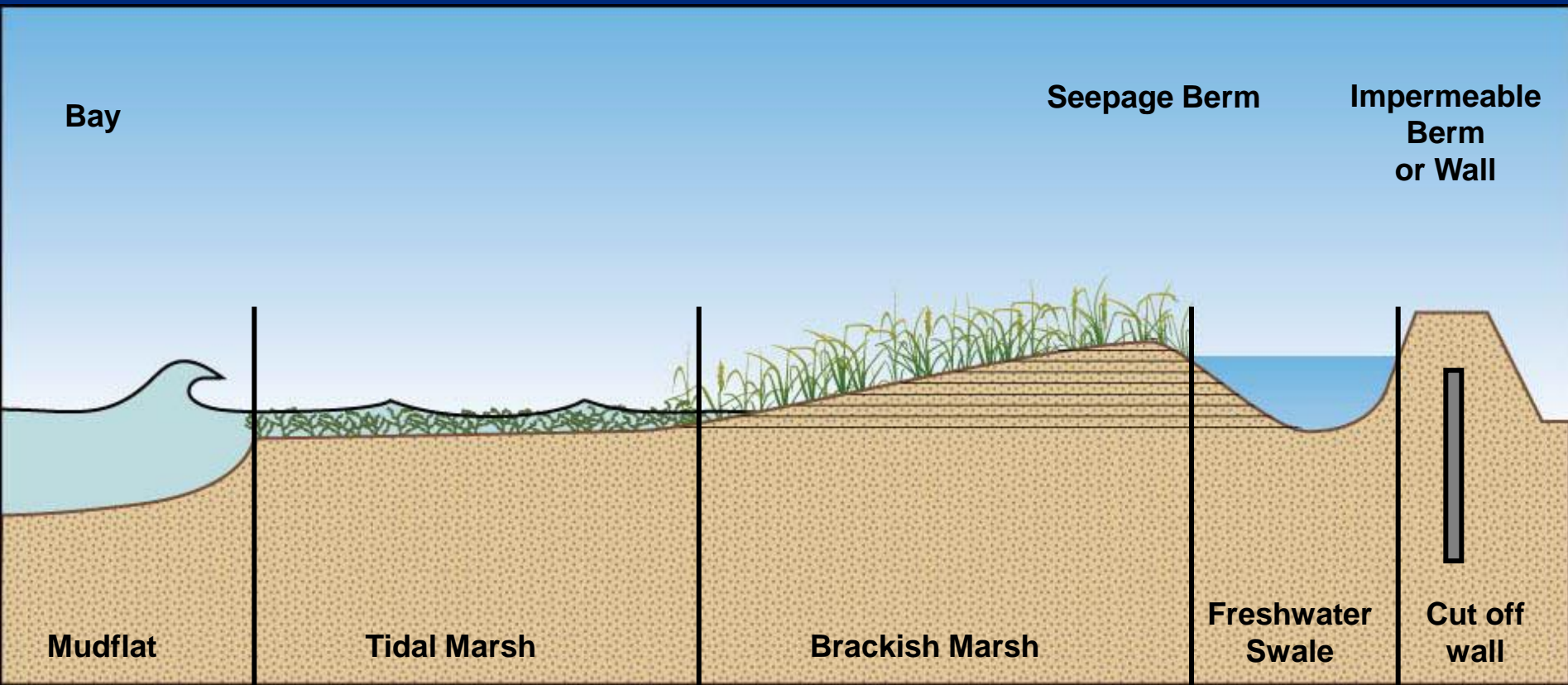
Water

- Large amount of treated water passes through area
- Opportunity to reconfigure EBDA line
- In the past, sources were more diffuse

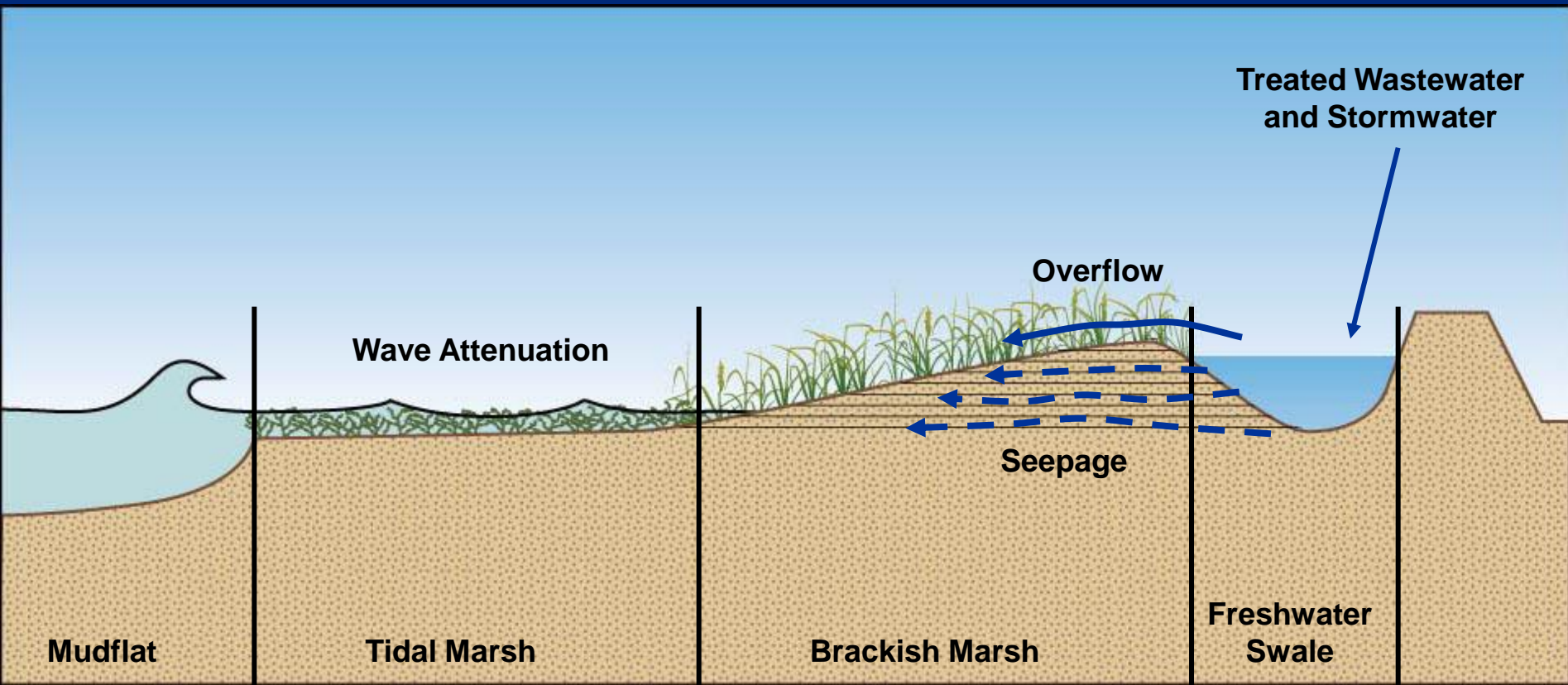
Sediment

- Trapped in channels in watershed
- Trapped in marinas further alongshore
- In the past, sources were more diffuse

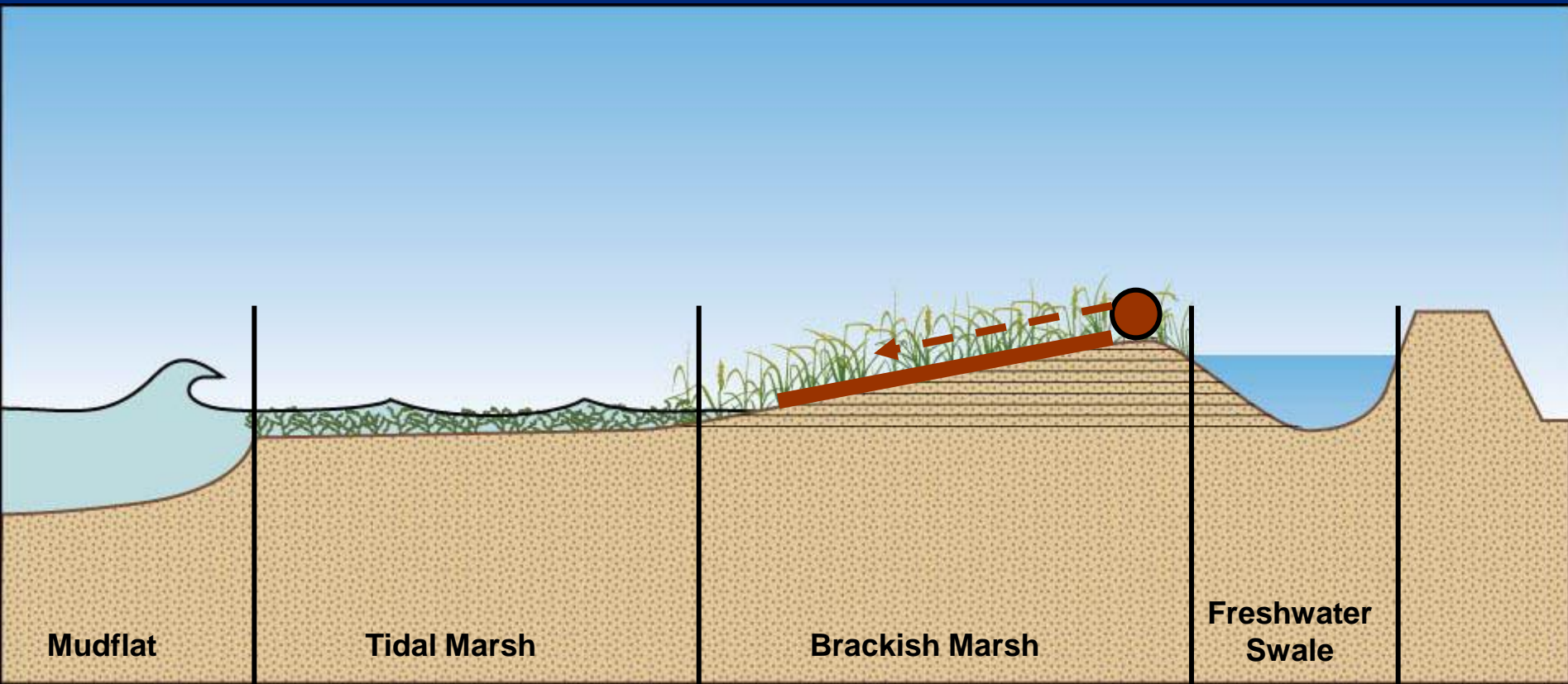
Gradual Steepening



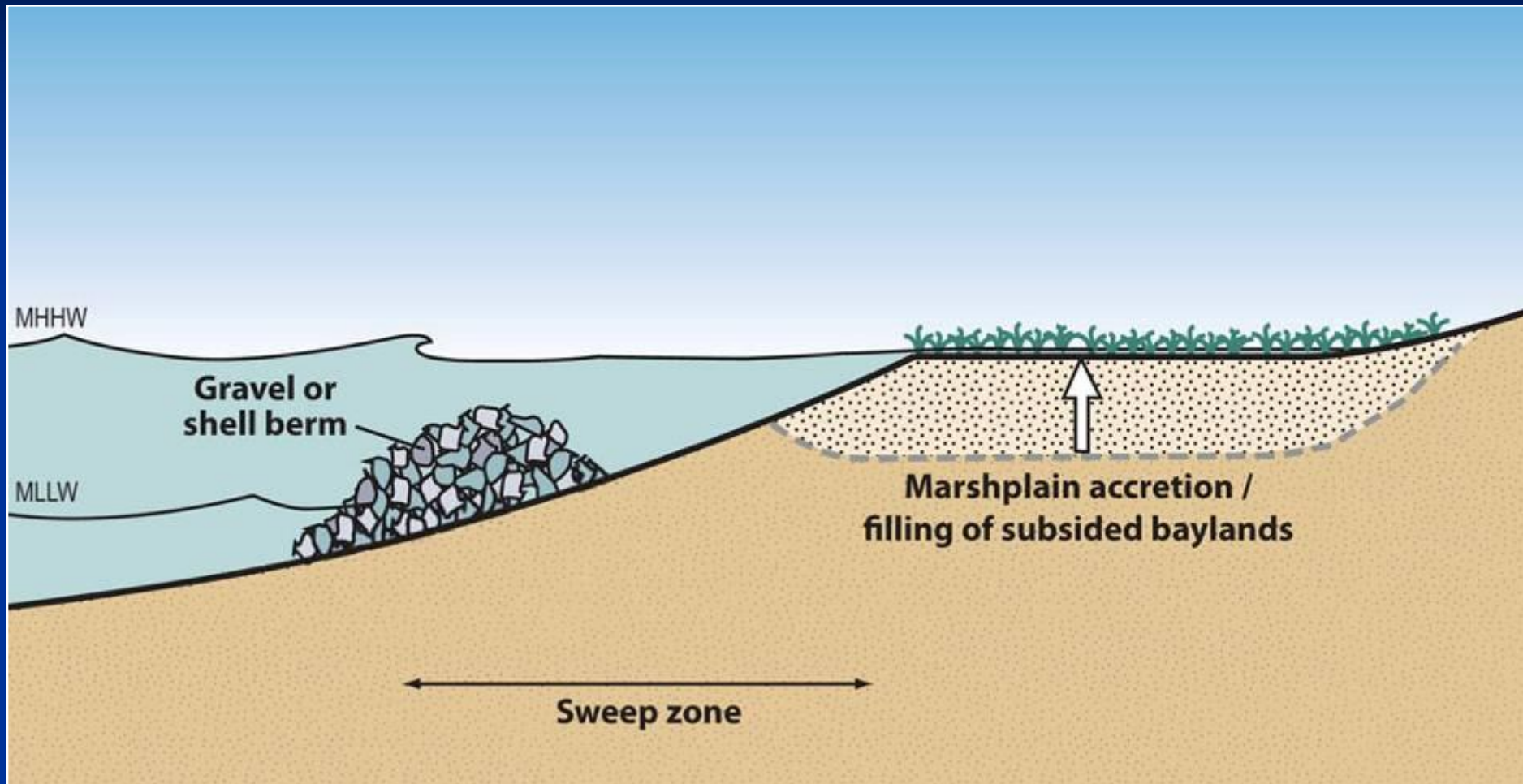
Gradual Steepening



Gradual Steepening



Diffused Armoring



Next Steps

- Master Plan
- Programmatic EIR
- Potential Funding
- Permits
- JPA